

## **WHAT IS CLAIMED IS:**

1. A composition comprising:
  - (a) at least one regulator of lipid metabolism;
  - (b) at least one regulator of polysaccharide metabolism;
  - (c) at least one regulator of cellular protein metabolism; and
  - (d) at least one regulator of nucleic acid metabolism,wherein the composition is formulated as a cosmetic blend.
2. The composition of claim 1, wherein the composition is comprised in a cosmetic vehicle.
3. The composition of claim 2, wherein the cosmetic vehicle comprises an emulsion, a cream, a lotion, a solution, an anhydrous base, a gel, or an ointment.
4. The composition of claim 3, wherein the emulsion is an oil in water emulsion or a water in oil emulsion.
5. The composition of claim 3, wherein the solution is an aqueous solution or hydro-alcoholic solution.
6. The composition of claim 3, wherein the anhydrous base is a lipstick or a powder.
7. The composition of claim 1, wherein the composition is comprised in an anti-aging product or a moisturizing product.
8. The composition of claim 1, wherein the composition is adapted for application at least once a day during use.
9. The composition of claim 1, wherein the composition is adapted for application at least twice a day during use.

10. The composition of claim 1, wherein the at least one regulator of lipid metabolism is selected from the group consisting of sodium citrate, linoleic acid, linolenic acid, biotin, glucose, sodium acetate, mevalonic acid, and serine, or derivatives thereof.
11. The composition of claim 1, wherein the at least one regulator of polysaccharide metabolism is selected from the group consisting of galactosamine, glucosamine, xylose, and magnesium chloride, or derivatives thereof.
12. The composition of claim 1, wherein the at least one regulator of cellular protein metabolism is an amino acid, or derivatives thereof.
13. The composition of claim 12, wherein the amino acid is a non-essential amino acid, or derivatives thereof.
14. The composition of claim 13, wherein the non-essential amino acid is selected from the group consisting of arginine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan, and valine, or derivatives thereof.
15. The composition of claim 12, wherein the amino acid is selected from the group consisting of serine, aspartic acid, glutamic acid, asparagine, glutamine, alanine, tyrosine, cysteine, glycine, and proline, or derivatives thereof.
16. The composition of claim 1, wherein the at least one regulator of nucleic acid metabolism is selected from the group consisting of sodium bicarbonate, aspartic acid, sodium phosphate, niacin, glutamine, and glucose, or derivatives thereof.
17. The composition of claim 1, wherein the composition comprises from about 0.001% to about 5.0% of at least one regulator of lipid metabolism.
18. The composition of claim 1, wherein the composition comprises from about 0.001% to

about 5.0% of at least one regulator of polysaccharide metabolism.

19. The composition of claim 1, wherein the composition comprises from about 0.001% to about 5.0% of at least one regulator of cellular protein metabolism.

20. The composition of claim 1, wherein the composition comprises from about 0.001% to about 5.0% of at least one regulator of cellular protein metabolism.

21. A method of treating or preventing aged or damaged skin comprising topical application of a composition comprising:

- (a) at least one regulator of lipid metabolism;
- (b) at least one regulator of polysaccharide metabolism;
- (c) at least one regulator of cellular protein metabolism; and
- (d) at least one regulator of nucleic acid metabolism,

wherein the application of the composition treats or prevents aged or damaged skin.

22. The method of claim 21, wherein the composition is chemically compatible.

23. The method of claim 21, wherein the damaged skin comprises nutritionally compromised skin or environmentally damaged skin.

24. The method of claim 23, wherein the environmentally damaged skin comprises skin damaged by u.v. light, chronic sun exposure, environmental pollutants, chemicals, disease pathologies, or smoking.

25. The method of claim 21, wherein the composition is further defined as a cosmetic composition.

26. The method of claim 21, wherein the composition is comprised in a cosmetic vehicle.

27. The method of claim 26, wherein the cosmetic vehicle comprises an emulsion, a cream, a lotion, a solution, an anhydrous base, a gel, or an ointment.
28. The method of claim 27, wherein the emulsion is an oil in water emulsion or a water in oil emulsion.
29. The method of claim 27, wherein the solution is an aqueous solution or hydro-alcoholic solution.
30. The method of claim 27, wherein the anhydrous base is a lipstick or a powder.
31. The method of claim 21, wherein the composition is comprised in an anti-aging product or a moisturizing product.
32. The method of claim 21, wherein the composition is applied at least once a day.
33. The method of claim 32, wherein the composition is applied at least twice a day.
34. The method of claim 21, wherein at least one regulator of lipid metabolism is selected from the group consisting of sodium citrate, linoleic acid, linolenic acid, biotin, glucose, sodium acetate, mevalonic acid, and serine, or derivatives thereof.
35. The method of claim 21, wherein at least one regulator of polysaccharide metabolism is selected from the group consisting of galactosamine, glucosamine, xylose, and magnesium chloride, or derivatives thereof.
36. The method of claim 21, wherein at least one regulator of cellular protein metabolism is an amino acid, or derivatives thereof.
37. The method of claim 36, wherein the amino acid is a non-essential amino acid, or derivatives thereof.

38. The method of claim 37, wherein the non-essential amino acid is selected from the group consisting of arginine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan, and valine, or derivatives thereof.

39. The method of claim 36, wherein the amino acid is selected from the group consisting of serine, aspartic acid, glutamic acid, asparagine, glutamine, alanine, tyrosine, cysteine, glycine, and proline, or derivatives thereof.

40. The method of claim 21, wherein at least one regulator of nucleic acid metabolism is selected from the group consisting of sodium bicarbonate, aspartic acid, sodium phosphate, niacin, glutamine, and glucose, or derivatives thereof.

41. The method of claim 21, wherein the composition comprises from about 0.001% to about 5.0% of at least one regulator of lipid metabolism.

42. The method of claim 21, wherein the composition comprises from about 0.001% to about 5.0% of at least one regulator of polysaccharide metabolism.

43. The method of claim 21, wherein the composition comprises from about 0.001% to about 5.0% of at least one regulator of cellular protein metabolism.

44. The method of claim 21, wherein the composition comprises from about 0.001% to about 5.0% of at least one regulator of cellular protein metabolism.